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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/778,880	02/08/2001	Paul Mariaggi	PET-1916	6684

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EXAMINER

RIBAR, TRAVIS B

ART UNIT	PAPER NUMBER
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1711

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DATE MAILED: 06/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/778,880

Applicant(s)

MARIAGGI ET AL.

Examiner

Travis B Ribar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-17 and 19-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-17,19-28,30 and 36-38 is/are rejected.
- 7) ☒ Claim(s) 29 and 31-35 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 20, 2003 has been entered.

Response to Amendment

2. The amendment filed February 20, 2003 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

Claims 37 and 38 include the language, "consisting essentially of". There is no indication in the specification, however, of what lies inside and outside of the scope of this language. For example, the specification includes additives such as flow control agents that affect the viscosity of the composition in the applicant's invention, but does not disclose whether the flow control agents lie inside or outside of the scope of, "consisting essentially of".

Applicant is required to cancel the new matter in the reply to this Office Action.

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Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, there is no description of any limitation given to the resin in the claim. Therefore, any teaching that fulfills the limitations of claim 1, upon which claim 20 is dependent, will also fulfill the limitations of claim 20.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3, 5-17, 19-28, 30, and 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nava in view of the combined teachings of Kittson et al. and Faber et al.

Nava discloses a resin used to line surfaces of pipes or wells that includes a polyester resin or a vinylester resin. The resin includes the maleic acid limitation of claims 3 and 7 (column 4, lines 2-11), the butylene glycol limitation of claims 5-6 (column 4, line 27), the vinyl ester limitations of claims 8-9 and 36 (column 4, lines 36-55), and the accelerator limitations of claim 16 (column 9, lines 8-16). Nava also

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discloses blending the resin with a polycarbodiimide (see the abstract) and styrene (column 7, line 36), meeting that limitation of claims 10-12. The styrene acts as a flow regulator (meeting claim 27) and will polymerize to form a polymer, meeting claim 28.

The claims including the initiators and inhibitors that begin and hinder (respectively) the reaction in the current invention (claims 13-15 and 17) amount to product-by-process claims. In product-by-process claims, "once a product appearing to be substantially identical is found and a 35 U.S.C. 102 or 103 rejection made, the burden shifts to the applicant to show an unobvious difference." MPEP 2113. The applicant has not shown that the method by which the product is made causes the product to be patentably distinct from the product produced by the reference(s). Specifically, the applicant has not shown that the initiators or inhibitors used in the present invention cause the final product to be distinct from the final product obtained using a different initiator or inhibitor. In addition, Nava discloses initiators (column 8, lines 30-56) similar to those the applicant claims and also teaches the general use of inhibitors (column 11, line 1), therefore providing further evidence that the product in Nava is the same as the product in the applicant's invention. This rejection under 35 U.S.C. 103 is therefore proper because the "patentability of a product does not depend on its method of production." *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985).

Nava also discloses that the well repair product may be impregnated with the fibers of claim 21 (column 4, line 56 to column 5, line 5), and the use of the resin in the application Nava discloses means that the resin inherently possesses the properties of

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claim 23. The polymerization temperature of the resin in Nava also meets the limitation of claim 24 (see the examples).

The dynamic viscosity of the resin in Nava appears to be the same as the applicant claims (see the examples) and the residual latent period appears to fall within the range the applicant claims (see the examples for gel time at 90°C). Here the examiner notes that the gel time at 90°C is much less than the claimed residual latent period. The addition of inhibitor (discussed later in this rejection) would address this disparity. Also, the applicant claims a very wide range of temperatures for the residual latent period (10°C to 90°C). The examiner believes that the reaction conditions would be so much slower at 10°C than at 90°C that the compositions in Nava might very well inherently possess a residual latency that overlaps the range the applicant claims.

Nava does not, however, disclose the motivation behind how much inhibitor to add to the resin composition or why one would manipulate the amount of inhibitor in the composition. Kittson et al. (column 4, lines 9-12) and Faber et al. (column 5, lines 58-64) disclose the common use of initiators and inhibitors in well- and pipe-repair compositions. They disclose that the amount of inhibitor is adjusted to manipulate the amount of time present before a reaction proceeds.

Regarding the dynamic viscosity, latent periods, petroleum and water absorption properties of the flexible preform, appearing in claims 1, 25-26, 30, 37, and 38 of the present invention, are properties inherent to a given material. As such, any material that fulfills the applicant's material claims fits these property claims as well. The preform meets the material claims set forth by the applicant, as shown above, because

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it is made by the same materials and is used for the same purpose as the applicant's current invention. Therefore even though Nava, Kittson et al., and Faber et al. do not refer to these properties of its invention, they still anticipate these aspects of claims 1, 25-26, 30, and 37-38.

Here the examiner notes that claims 30 and 37-38 reflect a combination of limitations already addressed in this rejection. This combination of references includes all of the limitations found in these claims.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use an inhibitor in the invention in Nava in an amount necessary to delay the reaction the amount of time that the applicant claims. The motivation for doing so would be to delay the onset of the reaction. Therefore it would have been obvious to combine Nava with Kittson et al. and Faber et al. to obtain the invention as specified in claims 1, 3, 5-17, 19-28, 30, and 36-38.

Allowable Subject Matter

7. Claims 29 and 31-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter:

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The applicant claims specific material compositions in claims 29 and 31-35. The closest prior art is Nava, which discloses material compositions similar to the applicant's but does not disclose the exact material compositions in these claims. It is the examiner's position that the applicant's claimed material compositions in these claims provides a novel and nonobvious contribution over the prior art.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis B Ribar whose telephone number is (703) 305-3140. The examiner can normally be reached on 8:30-5:00 Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (703) 308-2462. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

TBR
May 30, 2003

Travis B Ribar
Examiner
Art Unit 1711



James J. Seidleck
Supervisory Patent Examiner
Technology Center 1700